

The Energytools Report Rebuttal

Stacey Champion
and
Abhay Padgaonkar

Docket No. **E-01345A-19-0003** and **E-01345A-19-0236**

Special Open Meeting
September 28, 2020

Sources, citations, and detailed evidence in this presentation can be found in the filing.

- For sources, citations, and detailed evidence in this presentation, please refer to the **Six Fatal flaws in the Energytools Report confirm inadequate customer compensation by APS'** document docketed on September 22, 2020 in the following dockets:

Docket No. **E-01345A-19-0003:**

<https://docket.images.azcc.gov/E000009114.pdf>

or

Docket No. **E-01345A-19-0236:**

<https://docket.images.azcc.gov/E000009115.pdf>

“It is impossible now to unequivocally confirm these findings because there is no record of the results”

information, it is impossible now to unequivocally confirm these findings, primarily because there is no record of the results that the Initial Tool produced, nor of the recommendations it made. Energytools

“... it is impossible now to unequivocally confirm these findings, primarily because there is no record of the results that the Initial Tool produced, nor of the recommendations it made.”

- It would **appear?** And yet, Energytools somehow concluded that “it would **appear** that the Company has adequately compensated customers who changed rate classes for any potential bill impacts associated with the Initial Tool error.”

The Six Fatal Flaws Must Compel the Commission and the AG to Disregard the Energytools Findings

Fatal Flaw #1: By relying on ACC Staff's false statements and by misstating overland evidence, Energytools failed to investigate the most critical period (Aug '17-Aug '18) and parroted APS's narrative.

Fatal Flaw #2: Energytools treated exactly the same problem (off-peak hour treated as on-peak) completely differently by ignoring it in 2017-2018 but somehow accepting it in 2019.

Fatal Flaw #3: APS knew about the data shift error and problems other than the data shift error much sooner than what it has claimed, but energy tools failed to investigate it.

Fatal Flaw #4: Energytools ignored incorrect plan changes made by APS customer svc reps.

Fatal Flaw #5: Energytools failed to account for the full impact due to multiple flawed assumptions.

Fatal Flaw #6: Energytools completely missed the impact on non-residential, business customers.

Worrisome Problems With ACC Staff, Energytools, APS, and RUCO Don't End There

- **ACC Staff**: ACC Staff violated Arizona's Procurement Code and issued false statements, thereby putting its thumb on the scales even *before* the vendor was selected.
- **Energytools**: Energytools failed the most basic requirement of software evaluation: It's impossible to make sense of the most basic facts related to the Rate Comparison Tool's progression or timeline or GridX's and Brattle Group's detailed involvement.
- **APS**: APS failed to produce the books and records that were essential for this investigation and "examination of the books and records" of APS.
- **RUCO**: By not informing or alerting them, RUCO failed to protect the interests of residential ratepayers.

Recommendations to the Commission

- **Energytools**: The Commission must reject the findings in the Energytools Report as highly unreliable and order Energytools to rectify promptly all the major deficiencies in its report:
 1. Wrong Timeline
 2. Ignored Problems
 3. CSR Changes
 4. Wrong Assumptions
 5. Missing Tool Progression
- **Staff**: Refer ACC Staff to the Attorney General for enforcing violation of the Procurement Code and discipline ACC Staff for making false statements.
- **APS**: Subpoena APS and sanction APS if it fails to produce detailed web logs. Order APS to compensate ratepayers in full dating back to August 2017

Fatal Flaw #1: The Lost One Year From Aug 2017 to August 2018

- ACC Staff's made provably false statements in the RFP regarding the timing of the Tool's launch and when questions began surfacing about its accuracy: 01345A-16-0036 and E-01345A-16-0123. The Tool was launched for public use in 2018.

Early in 2019, questions began to surface regarding the accuracy of the Tool's results,

- Commissioner Kennedy's December 13, 2019 Letter had documented **2017** complaints, which clearly show that both statements by ACC Staff were false.

...the rate increases. I was not happy because the new rate plans appeared to have substantial increases over and above the reported increases of \$6.00 month. The APS website had a comparison tool where you could compare your current rates for the past 11 months with each of the new plans. However, I found out today from a representative at APS who contacted me that the tool comparison box was inaccurate and has been temporarily removed from their site. Apparently, it was putting out much higher increases due to a software glitch. It will be fixed and back online next week. This is what prompted me to write the email in the first place. So, the increases I talked about in my email letter to the reporter are not accurate. I also got clarification that the \$6.00 a month increase is an average figure for

Complaint from Customer B to ACC on December 4, 2017: "I was using their rate plan comparison tool on the APS website too [sic] compare my current plan to the new rate plans that they are encouraging people to switch to. Their tool made it look like some of the new plans would result in costs close to the same as my current plan, but when looking closer they are falsely making them look better than they are. On several months I noticed that it is reporting that my current plan (Combined Advantage 7pm-noon) cost is much higher than [sic] it really is." ... "If people switch plans using this incorrect information, they will not be allowed to switch back because they are on one of the old plans and will be stuck with the newer plans that are much higher."

* 12/08/2017 - I spoke with [redacted] to discuss his concerns regarding the rate comparison tool on the APS website. He advised me that it was not a good time and would contact me on Monday, 12/11/2017. I will send an update once [redacted] has contacted me.

In response to your questions:

Is there a discrepancy in customer's historical charges versus what rate comparison tool reports?

No, the rate comparison tool on the APS website reflects what the customer's energy charges would be based on the current rates.

What is length of time you need to be on plan prior to switching to another?

Typically, customers are allowed to change their rate once every 12 months. However, due to the new rates, APS is allowing customers to change their rate twice in the first 12 month period.

Please let me know if you have any questions.

Thanks,
Jenna Nelson
APS Consumer Advocate Rotation
400 North 5th Street, Phoenix, AZ 85004-3902, M.S. 9774 Tel (602) 260-2280 jenna.nelson@aps.com aps.com

Fatal Flaw #1: (Cont.) Energytools repeated Staff's false claims and reached a wrong conclusion

- Energytools followed ACC Staff's lead by copying Staff's false statements:

Company in the wake of its Residential Rate Redesign in those dockets. The "Initial Tool," also referred to as the "GridX Tool" in this report, was launched for public use in August of 2018. Early in 2019 questions began to surface regarding the accuracy of the Initial Tool's results, and whether the Initial Tool's conclusions regarding the optimal rate plan for the customer were correct. Numerous ratepayers

- At the same time, Energytools contradicted itself by admitting that GridX tool was, in fact, available on August 19, 2017.

When the Company's Residential Rate redesign, authorized in Decision No. 76295, was implemented on August 19, 2017, the primary calculation engine for comparing customer bills under each customer's eligible rate options was the GridX rate comparison tool. As indicated by the Company in response to

- As a result, it falsely concluded that "Energytools believes that after this time (and prior to February 2019), the information posted on the APS website with respect to rate plan recommendations was correct."
- To justify its flawed belief, Energytools also completely misstated evidence by Overland despite the fact that APS had blocked Overland from gaining direct access to the tool.

Fatal Flaw #2: Energytools accepted that the off-peak hour treated as on-peak was an error in 2019

- Energytools treated the “acknowledged” problem of the mismatch between TOU periods (i.e., 2-3 PM **off-peak hour treated as on-peak**) as significant enough to make incorrect rate plan recommendations as follows:

Finding II-4. There was an acknowledged mismatch between the TOU periods of the TOU rates and the TOU periods that were used to develop billing determinants for the GridX model. This mismatch was significant enough to cause the GridX model to make incorrect recommendations related to the “best” rate plan for customers who accessed the model. Based on the methodology discussed in Chapter IV,

Fatal Flaw #2: (Cont.) But made excuses for and ignored the exact same error since August 2017

- But in its response, APS had admitted to Comm. Kennedy that because the tool was treating the 7-8 PM **off-peak hour as on-peak**, the tool had presented ratepayers with “**overstated projections**” that alarmed customers.

behavior in response to the change in on-peak hours. This resulted in **overstated projections** that alarmed some customers. This is evidenced in Complaint 2017-



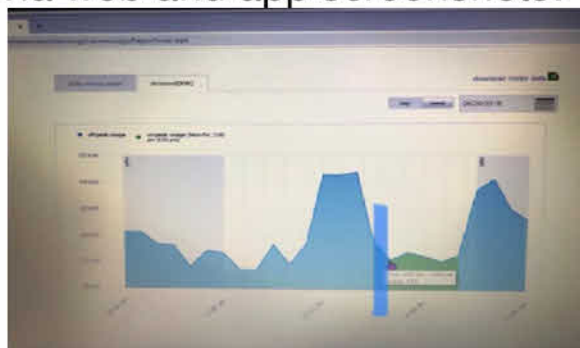
- **Complaint 2017 – 144731**, was filed with the ACC on **August 30, 2017**. The actual on-peak demand in the August bill was **4.1 kW**, but the rate comparison tool erroneously used **12.6 kW** demand during the off-peak hour and made grossly overstated projections.
- Because of that the increase was projected to be **\$425-\$460**. When the customer complained about the high increase being inaccurate, APS **manually** "had another rate comparison performed utilizing his peak demand of 4.1 kW" based on which the "minimal increase" was only **\$15**.

Fatal Flaw #3: A customer had proven to APS in July-Sep 2019 that the data was shifted by one hour

- The complainant had first reported the issue in writing to APS via an email on **July 17, 2019** saying that the 2-3 PM was showing the on-peak color (**green**) instead of the off-peak color (**blue**).

I initially programmed it to shut off 15 minutes ahead of time, but I noticed that when I compared my daily demand on the APS app, that there was still quite a large peak of electricity usage in the green (peak usage). I experimented in 15 minute increments and I had to push it back all the way to 2:00pm to get it to drop off where the usage was no longer in the green.

- Complaint **2019 – 160008**, filed with the ACC on **September 14, 2019**, was extremely specific and accurately proved to APS the existence of the 2-3 PM data error via web and app screenshots:



- APS simply denied on September 20th that inaccurate data was being displayed and gaslighted the complainant by blaming it on her “misunderstanding.” Nearly two months later on November 14, 2019, APS claimed that it became aware of the exact same problem of the 2-3 PM off-peak hour being treated as on-peak!
- "APS changed it when I caught them," according to the complainant -- meaning that APS was not only aware of the problem, but that APS had taken action to fix the problem whereby the complainant could no longer replicate the error.

Fatal Flaw #3: (Cont.) Another ACC complaint by the same customer was completely ignored

- The same complainant had filed **2019 - 160009** also on **September 14, 2019** which went to a different ACC investigator (Trish Meeter).
- She asked APS several questions, including previous complaint in July and why the peak hour was showing one hour before peak hours began.

Please contact the customer to address the on peak data concerns.

What previous complaint was received by this customer.

Was it addressed at that time?

What is the company's response to being charged on peak pricing one hour before on peak hours begin?

What daily data information can be provided to the customer for consumption clarification?

Please provide a written response to the Commission once customer has been contacted.

- There was **no further follow-up or documentation** by either APS or the ACC.

Fatal Flaw #3: (Cont.) APS was well aware of the data mismatch of interval data from Ms. Champion

- Ms. Champion provided a specific example for the month of December 2018 for which ALL the usage parameters the **third-party vendor** had used based on the interval data were wrong.
- Ms. Champion questioned APS whether anyone had compared "the usage against the actual monthly bills" and **"If, in fact, there is a wide discrepancy in usage in the rate comparison vs. actual monthly bills, why should I (or anyone else) believe the results of the rate comparison?"**
- When challenged, APS **internally** performed a manual rate comparison and, miraculously, ALL the usage parameters APS had used based on the billed data were correct.
- **Complaint 2019 – 160128** shows that Ms. McFall told the ACC that her response to Ms. Champion had to be **reviewed by all the right parties** – showing an escalation and clear knowledge within APS.

Hey Al.

its Beth I just wanted to touch bases with you in regards to the <<< REDACTED >>> complaint no. 160128 I have been email correspondence with her so outreach to her has been taking place. We are going to need a bit more time to get the response over to you just **need to make sure that its review by all the right parties** before I sent that over hoping that will be tomorrow if not the beginning of next week. I just wanted to touch basis with you so you know where we are at. With that if you have any questions feel free to give me a call. 3:51 PM on 10/3/2019

Fatal Flaw #4: Energytools ignored incorrect plan changes made by APS Customer Service Reps

- APS also sent out probably hundreds of thousands of "Best Rate" letters asking customers to visit the APS website or **call APS at (855) 371-3635** to "switch plans" pursuant to Decision No. 77270 during the problematic February-November 2019 period.
- Energytools acknowledged that "if a customer called the Company to inquire about alternative rate plans, the APS Customer Service Representative ("CSR") accessed the tool to assist customers in determining the bill impact."
- However, Energytools restricted its own analysis to the "Initial Tool log," and thereby only to customers who changed their own plan online.
- Thus, Energytools **completely overlooked and failed to take into account** the fact that many other customers received wrong advice from and switched to incorrect, suboptimal plans by an APS Customer Service Representative.

Fatal Flaw #5: Energytools failed to account for the full impact due to flawed assumptions

- Further, Energytools made the following two wrong assumptions:
 - a) “The impact calculations do not include any kwh adjustments, since these shifts are negligible” compared to the bill shifts from the kW impact that occurred.”
 - b) “This shift primarily affected the ranking of the R-2 and R-3 rate classes vis-a-vis the other rate classes, as they have a demand component based on the peak kW that happens during the 3pm to 8pm timeframe.”
- However, the annual impact of the kWh adjustment because of the shifted hour on a given customer can be significant:

Annual Impact

6 kWh weekday shift from off-peak to on-peak * 22 weekdays per month * 12 months * \$0.13 difference between on-peak vs. off-peak rates for R-TOU-E plan * 11.44% taxes and fees = **\$229.47**

- Also, even a TOU plan (Saver Choice) without a demand component was incorrectly being recommended as the Most Economical Plan, meaning that the one-hour data shift affected more than just the ranking of the R-2 and R-3 plans and it is likely that flat rate plans like Lite Choice and Premier Choice as well.

Fatal Flaw #6: Energytools failed to account for the impact on no-residential, business customers

- Energytools limited its investigation and analysis to only residential customers.
- There is ample evidence that, MEP or otherwise, shifted hourly data error, incorrect billing determinants, and consequently being placed on a wrong rate affected non-residential, business customers, who also can be on rate plans with the same 3-8 PM on-peak window.
- As Complaint **2019 – 158753** filed on June 13, 2019 by an HOA, a non-residential customer, clearly shows, Non-residential customers accessed the "**calculator**" for "**rate comparison off the APS website**" as follows:

We would expect that they would move us to the plan that should be the most cost effective based upon our usage profile. As we learned last week, they actually moved us to the plan that was the most expensive to us. I have attached a rate comparison generated off the APS website for our account using our actual plan compared to the other two options. See Exhibit B. The data for 2018 is not valid as this calculator uses a rate plan that is not reflective of what we actually had been on. But the 2019 data is accurate. For the first 5 months of the year, had we been on the XS GS plan our bills would have been \$6,764.02 less. According to Scott in their business group, he indicated that he had never seen an account where the difference was so large between these three XS rate plans.

- The tool APS used to automatically move non-residential customers to a different plan also selected an incorrect and **the most expensive plan**.
- When challenged with these facts, APS credited this HOA customer with a total of **\$8,559.67**, proving that being on a non-economical plan is extremely expensive for non-residential customers as well.

The Commission must refer ACC Staff to the AG for violations of Arizona's Procurement Code

- On December 11, 2019, the Commissioners directed ACC Staff to compile an RFP to review the issues surrounding the Rate Comparison Tool.
- Nevertheless, on December 18, 2019, Jim Armstrong asked: "Are we going RFP? I thought we were just reaching out to the one consultant at this point?"
- Utilities Division Staff proceeded to correspond with Paul Raab within a week of the December 11th meeting to sole-source the contract.
- Staff continued discussing the matter with Mr. Raab for nearly a month until the RFP was finally issued, thereby violating Arizona's Procurement Code on the Attorney General's website.
- Mr. Raab was also instructed to tune into future open meetings, had phone calls with ACC Staff, was kept advised, and was also sent documents to review. Jim Armstrong personally and specifically made Mr. Raab aware of the RFP after it was issued although Mr. Raab was already on the mass email distribution list.
- Jim Armstrong and Ranelle Paladino gave Laurie Woodall Feb 2019-Jan 2020 timeline, which she questioned based on Comm. Kennedy's letter.
- ACC Staff also limited the scope of the investigation to minimize expense to APS, and created a "review team" to give the appearance of an unbiased selection process before "selecting" Energytools.

Energytools failed the most basic requirement of software evaluation: progression/timeline of the tool

- The RFP required Energytools to conduct "an independent investigation of APS's development, implementation and post-completion assessment of an online Rate Comparison Tool."
- But Energytools has **zero** information on the role **GridX** played:
 - a. When was the rate comparison tool first launched? (In Sep. 2017, California PUC ordered utilities to develop scripts similar to those used by APS)
 - b. Who designed the online tool?
 - c. Who developed the online tools?
 - d. Which version of the tool was in effect and over what periods of time?
 - e. What did various software versions represent and why?
 - f. What software bugs were identified and fixed along the way?
 - g. When was GridX first retained by APS for the rate comparison tool project? (GridX reported as of February 28, 2018 that APS was a client.)
 - h. Whether or not Energytools interviewed GridX

Energytools failed the most basic requirement of software evaluation: Brattle involvement

- Similarly missing is when exactly did APS engage **Brattle** and for what purpose during 2017-2019?
- When did these engagements with Brattle begin and end and what was the scope of those engagements?
- Specifically, was Brattle already engaged to work on the New Tool at the time of the faulty rate comparison tool story broke on November 14, 2019 and, if so, when?
- What did Brattle know and when did it know about the various defects in the rate comparison tool, including but not limited to the data-shift error and interval data?
- When was the development of the New Tool commissioned prior to November 14, 2019 and did Brattle have a role to play in it?
- Which other vendors other than GridX and Brattle worked on the rate comparison tools? There is zero information in the Energytools Report.
- Whether or not Energytools interviewed Brattle

APS must be sanctioned if it fails to produce proper accounts and records

- The E-01345A-19-0003 docket was created with an express purpose to conduct “the rate review and **examination of the books and records of Arizona Public Service Company** and its affiliates, subsidiaries and Pinnacle West Corporation.”
- Although Energytools has generously stated that it “found deficiencies” in APS's logging of customer's interactions with the Tool, the reality is that APS claims to have retained such minimal information that it was worthless.
- The lack of information prompted Energytools to state that “it is **impossible now to unequivocally confirm these findings** because there is no record.”
- APS claimed that it does not have any web logs related to the web tool, **despite** the Gridx information being shown under the aps.com website.
- The Commission must subpoena APS for the web logs, and all the internal/external communications related to the software development and assessment projects, and sanction APS if it fails to produce the detailed books and records as to its operations with regard to the Rate Comparison Tool — deemed to be “the most important” component.

Conclusion

The Commission (and the AG) must reject the findings in the Energytools Report as highly unreliable and order Energytools to rectify promptly all the major deficiencies:

1. **Wrong Timeline:** Complete analysis of overstated projections and incorrect plan recommendations by the rate comparison tool starting in August 2017 due to off-peak usage being treated as on-peak.
2. **Ignored Problems:** Beyond just the data shift error, complete analysis of other root causes (e.g., discrepancy between interval vs. billed data) leading to inaccurate accounting of on-peak vs. off-peak usage, overstated projections, incorrect plan recommendations, and possibly even inaccurate billing.
3. **CSR Changes:** Complete analysis of incorrect plan recommendations and suboptimal plan changes performed by APS Customer Service Representatives since August 2017;
4. **Wrong Assumptions:** Complete analysis without the flawed assumptions about kWh adjustments, plans with demand component, and non-residential, business customers;
5. **Missing Tool Progression:** Create a detailed timeline since 2017 for the various Rate Comparison Tools by documenting every release and version, when it was released in production, what bug fixes and/or upgrades it contained, who did what testing, who authorized the software release, etc.